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The Role of Risk Management on Banking Profitability through ROA

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Abstract

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The banking sector plays a strategic role in the economy through its intermediation function, which connects surplus units with deficit units. Nevertheless, banking activities are continuously exposed to various risks, such as credit, liquidity, operational, and market risks, all of which can significantly influence financial performance. This study aims to analyze the relationship between risk management and bank profitability, particularly Return on Assets (ROA), by conducting a literature review of the most recent empirical research. The findings highlight that the effectiveness of risk management has a significant impact on bank profitability. Uncontrolled risks may reduce ROA through an increase in Non-Performing Loans (NPLs), operational expenses, and reputational losses. Conversely, sound risk governance practices strengthen financial stability, enhance customer trust, and improve the bank's competitive position in the market. These results emphasize the importance of implementing integrated risk management that aligns with business strategies to ensure sustainability and to improve banking performance.

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1. Introduction

Banking holds a very vital position in a country's economy due to its role as a financial intermediation institution that bridges parties with excess funds (surplus units) and those who need funds (deficit units). This intermediation function does not merely flow funds from savers to borrowers, but also contributes to the financing of the real sector, maintains monetary stability, supports the smooth flow of the payment system, and encourages overall economic growth. Through the activities of collecting public funds in the form of savings and redistributing them in the form of credit, banking is able to drive consumption, stimulate investment, expand employment opportunities, and improve the standard of living of the community. However, behind these contributions, the banking sector also faces complex risks, so effective risk management is key to maintaining business sustainability and bank profitability (Bhatti et al., 2020).

One of the main indicators used to assess bank profitability is Return on Assets (ROA). This ratio describes the extent to which a bank is able to generate net profit from the total assets it controls. A high ROA indicates management efficiency in managing assets and reflects relatively good financial stability. Conversely, a decrease in ROA often indicates problems in risk management, for example, an increase in the number of Non-Performing Loans (NPL) or the occurrence of unforeseen operational losses (Dewi et al., 2021). Several empirical studies confirm that strong risk management practices have a positive impact on banking profitability, while weak risk supervision and control actually suppress financial performance and increase the potential for losses (Karyani et al., 2020).

In the context of banking, risk management includes the process of identifying, measuring, monitoring, and controlling various main types of risks, including credit, market, liquidity, and operational risks. Success in managing these risks not only serves to protect the bank from potential financial losses but also ensures compliance with regulations, maintains customer trust, and supports the stability of the financial system. Conversely, risk that is not managed well can result in direct losses, weaken liquidity, suppress profitability, and even damage the reputation of the banking institution. A tarnished reputation will have an impact on a decrease in public trust, which in turn reduces the collection of third-party funds and worsens the bank's overall financial condition (Duho et al., 2020).

Recent research shows that risk management cannot only be viewed as an instrument of protection, but also as a business strategy that can create added value for shareholders and other stakeholders. For example, a study in a developing country found that effective credit risk control genuinely contributed to an increase in ROA, especially for public banks. Conversely, weak risk management practices tend to worsen bank financial performance due to the high potential for non-performing loans (Sharifi et al., 2019). Furthermore, research in the ASEAN region shows that good risk governance plays a role in strengthening banking profitability and stability, so there is a positive link between risk regulation, the sustainability of the financial system, and the overall improvement of bank performance (Karyani et al., 2020).

Based on this background, this paper focuses on examining the relationship between risk management and banking profitability as measured by the ROA indicator. The approach used is a literature study, by reviewing various previous research results to obtain a more comprehensive understanding of the importance of risk management in maintaining the performance and sustainability of the banking sector. It is hoped that this study can provide both academic and practical contributions, especially for regulators, banking management, and other stakeholders who have an interest in strengthening the stability of the national financial system. With directed risk management, banking is not only able to protect itself from external shocks, but also plays a more active role in supporting inclusive and sustainable economic development.

2. Literature Review

2.1. Banking Risk Management

This Risk management in the banking sector is a structured and integrated process, which includes the stages of risk identification, measurement, monitoring, and control aimed at minimizing potential losses while maintaining business continuity. The risks faced by banking institutions are fundamentally very diverse, but there are four main categories that are of major concern, namely credit, liquidity, market, and operational risks. Of the four, credit risk is often considered the largest because it is directly related to the bank's core activity, namely the intermediation function through lending. A high level of non-performing loans (NPL) can damage a bank's financial stability. Therefore, effective credit risk management is crucial to maintaining performance. A number of empirical studies found that good credit risk management was able to suppress NPL and at the same time encourage an increase in Return on Assets (ROA), which is an important indicator of bank profitability (Sharifi et al., 2019).

Apart from credit risk, banking must also anticipate liquidity and market risks. Liquidity risk arises when the bank is unable to maintain a balance of cash flow to meet short-term obligations, which can have implications for a decrease in public trust in the institution. Likewise, market risk is related to fluctuations in exchange rates, interest rates, and asset prices which can reduce bank income. Research in Nigeria provides evidence that comprehensive financial risk management practices have a positive effect on ROA, thereby confirming the importance of good risk governance in strengthening the profitability and stability of the banking system (Gadzo et al., 2019).

2.2. Profitability and ROA as Performance Indicators

Profitability is often considered one of the most important indicators in assessing the performance of a bank because it can reflect business health and sustainability. In academic and industry practice, Return on Assets (ROA) is widely used as the main measure of profitability. This ratio assesses management's effectiveness in optimizing all assets it owns to generate net profit. The higher the ROA value, the more efficient the bank is in utilizing existing resources. Conversely, a decrease in ROA is often a signal of weaknesses in governance, efficiency, or risk management. Research in developing country markets shows that a number of internal factors such as bank size, risk management strategy, and the level of operational efficiency have a significant influence on ROA (Buyl et al., 2019).

Similar findings were also reinforced by research in China which revealed that insolvency risk has a negative relationship with ROA, so an increase in default risk tends to reduce profitability. However, the research also confirmed that factors of managerial efficiency and the level of competition in the industry actually contributed positively to the bank's ability to increase profitability (Tan et al., 2021). In other words, apart from asset size, the quality of risk management and the competitive environment also determine financial performance.

Therefore, ROA is not only seen as a financial measure, but can also be an indicator of the success of risk management implementation. Banks with high ROA values usually demonstrate more disciplined and efficient risk management and are able to maintain stability even when faced with market dynamics and uncertainty.

3. Methods

This research uses a literature study method with a descriptive qualitative approach. The choice of this method is based on the consideration that a literature study is able to present a broader, more systematic, and comprehensive picture of the relationship between risk management, profitability, and Return on Assets (ROA) in the context of banking. In this way, researchers can review, compare, and interpret the results of previous empirical research without having to collect primary data. The main focus is not on field data, but rather on critical analysis, synthesis of concepts, and in-depth interpretation of relevant secondary sources such as reputable scientific journals, research reports, and other academic publications.

The research stages begin with searching for scientific articles through various credible online databases. The selected articles are then filtered based on certain inclusion criteria, for example, published within the last five years to ensure timeliness and relevance. In addition, the article must directly discuss the topic of banking risk management, profitability, and the use of ROA as a key performance indicator. Every article that meets the criteria is then analyzed based on the research method used, key findings, and its contribution to understanding the effectiveness of risk management in increasing profitability.The analysis process is carried out using a thematic approach. The research findings are grouped into certain themes, for example, credit risk, liquidity risk, risk governance, and their direct relationship to profitability as measured using ROA. This approach allows researchers to identify recurring patterns, examine differences, and find similarities between research results in various countries and time periods.

In addition, this literature study is also used to build a conceptual framework that explains the relationship between risk management and profitability. By integrating empirical evidence from various contexts, the research is expected to be able to provide a more in-depth understanding of how banks can increase the effectiveness of risk management in order to strengthen financial stability and performance. Through this approach, this research does not just summarize previous results, but also provides a critical interpretation of the relevance of the findings to current banking conditions. Thus, the research objective, namely to provide a conceptual and practical contribution about the importance of risk management in supporting the sustainability of the banking sector in an era full of uncertainty, can be achieved.

4. Results

The results of the literature review show that risk management has a significant influence on banking profitability, especially if financial performance is measured using Return on Assets (ROA). This indicator is considered very important because it is able to provide a picture of the extent of the bank's effectiveness in managing its assets to generate net profit. In the modern banking industry, the ability to generate sustainable profitability not only determines the survival of the banking institution itself but also contributes to the stability of the national and even global financial system.

Banks as financial intermediation institutions have a central role in channeling funds from parties who have a financial surplus to parties who have a financial deficit (Sukmana et al., 2020). This intermediation function can run optimally only if the bank is able to maintain the level of public trust, which is closely related to the bank's ability to manage various forms of risk inherent in intermediation activities. The better the risk management practices implemented, the higher the possibility for the bank to maintain stability, increase profitability, and strengthen its competitiveness amid the dynamic and uncertain economy.

Among the various types of risks faced by the banking sector, credit risk is the most dominant because the majority of bank assets are in the form of loans distributed to debtors. Credit risk is defined as the inability of an organization, whether a company, institution, or individual, to fulfill its responsibilities. Bank management must be able to handle credit problems such as non-performing or bad loans; credit risk describes the quality of bank loans. The bank will experience losses in operations and reduce profitability if the number of non-performing loans increases. Credit risk arises when the debtor is unable to fulfill payment obligations according to the agreement, which in the end has the potential to cause losses for the bank. Research in India found that credit risk management has a direct relationship with the profitability level of public banks (Sunaryo et al., 2021).

Banks that are able to maintain the quality of their credit by suppressing the Non-Performing Loan (NPL) figure show better financial performance, characterized by a higher ROA. Conversely, banks with high NPL levels tend to experience a decrease in profitability because they have to bear the burden of credit loss provisions as well as a decrease in interest income (Sharifi et al., 2019). These research results reinforce the understanding that credit risk management is not merely a regulatory obligation, but a fundamental strategy that determines the long-term competitiveness and performance of banking. The implementation of prudential principles, the use of credit scoring systems, and strict evaluation of debtor feasibility are some of the steps that must be taken so that credit risk can be minimized.

Apart from credit risk, banking is also faced with liquidity risk which is no less important. Liquidity risk relates to the bank's ability to meet short-term obligations, especially in meeting customer fund withdrawals. A bank that fails to maintain liquidity has the potential to lose public trust and can experience a bank run, which has a very serious impact on business continuity. Research in Nigeria shows that financial risk management practices that include controlling liquidity and market risks make a positive contribution to increasing ROA. A bank that has a good liquidity management mechanism is able to maintain the stability of cash flow, anticipate the possibility of a mismatch, and still maintain profitability amid fluctuating market conditions (Gadzo et al., 2019). Market risk itself relates to fluctuations in interest rates, exchange rates, and the prices of financial instruments owned by the bank. The inability to anticipate market changes can lead to a decrease in interest income and a decrease in asset value. Therefore, managing the asset and liability structure through an asset-liability management strategy is very important so that banks are not exposed to excessive market risk that can erode profits.

Apart from these two risks, risk governance has also been proven to play an important role in strengthening bank profitability (Pratiwi & Kurniawan, 2018). Research in the ASEAN-5 region shows that banks with good risk governance are better able to minimize potential losses and increase customer trust. The implementation of strong risk governance not only increases operational efficiency but also has a direct impact on increasing ROA. These findings confirm that risk management must be integrated with strong corporate governance so that it can run effectively (Karyani et al., 2020). Transparency, accountability, and independence in decision-making are the main elements of risk governance that can strengthen the foundation of banking stability.

Management efficiency is also one of the important factors that determine the level of bank profitability. Research in frontier markets shows that banks that are able to manage insolvency risk, capital risk, and liquidity risk effectively tend to have higher profitability. Conversely, failure to control these risks causes an increase in operational costs and losses which ultimately lowers ROA (Duho et al., 2020). Insolvency risk itself arises when a bank does not have sufficient capital to cover its long-term obligations, which has the potential to lead to bankruptcy. Therefore, implementing adequate capital policies, implementing Basel standards, and strict internal supervision are important steps in reducing the possibility of insolvency.

The literature review also shows that there are variations in results between countries, which indicates that the local context also influences the relationship between risk management and profitability. For example, research in Indonesia found that bank size and the quality of risk management have a significant influence on ROA. Banks with large asset sizes generally have a better capacity to absorb risk, so they can increase stability and profitability. However, a too large bank size also has the potential to create systemic risk if it is not balanced with the implementation of effective risk management (Buyl et al., 2019). Meanwhile, research in China shows that insolvency risk has a negative influence on ROA, but competition between banks can actually encourage an increase in efficiency and profitability. This finding indicates that external factors such as market dynamics and the level of competition also play a role in determining banking performance, in addition to internal factors in the form of the quality of risk management (Tan et al., 2021).

The synthesis of these various studies shows that the effectiveness of risk management is the main determinant of banking profitability. Credit risk, liquidity risk, market risk, and even insolvency risk have been shown to have a close relationship with ROA. A bank that is able to manage these risks in an integrated and sustainable manner will find it easier to maintain its financial performance compared to a bank that is weak in risk management. On the other hand, strong risk governance strengthens the effectiveness of risk management and increases public trust. External factors such as the level of competition, regulation, and economic conditions can also strengthen or weaken the relationship between risk management and profitability.

The implications of these findings are very important, both from an academic and practical perspective. From an academic perspective, the results of this study enrich the literature on the relationship between risk management and profitability with ROA as the main indicator. This research can be used as a conceptual basis for further studies to explore the causal relationship between variables in various countries and different time periods. From a practical perspective, the results of this study provide guidance for regulators and bank management in formulating policies and strategies. Regulators need to strengthen the risk management regulatory framework so that it is not only viewed as a compliance obligation but also as an integral part of the bank's business strategy. For bank management, the results of this research confirm that risk management must be integrated into all operational lines. With comprehensive risk management, banks can not only avoid losses but also be able to take advantage of opportunities to increase long-term added value and profitability.

The overall results of the study confirm that the effectiveness of risk management is key to maintaining the sustainability of the banking business amid a global environment full of uncertainty. ROA as an indicator of profitability has been proven to be very sensitive to the quality of risk management, so it can be used as an important tool for evaluating bank performance as well as a basis for formulating future strategic decisions. Therefore, risk management must be viewed not only as a protection mechanism but also as a value-creating strategy that allows banks to remain competitive, stable, and sustainable in the face of market challenges.

5. Discussion

The discussion of this research consistently confirms the importance of implementing comprehensive risk management in strengthening banking profitability. The literature analyzed shows that credit risk is the most influential dominant factor on the level of Return on Assets (ROA) as the main indicator of bank financial performance. The dominance of credit risk can be understood because the core function of banking is to channel credit to debtors. If the credit channeled has good quality, this will be reflected in the low ratio of non-performing loans or Non-Performing Loans (NPL) (Nugrohowati & Bimo, 2019). Banks that succeed in maintaining the quality of their credit portfolio through strict debtor selection, continuous monitoring, and the application of prudential principles in lending, tend to have a higher ROA. Thus, low NPL not only reduces potential losses but also strengthens the bank's stability and profitability as a whole.

Nevertheless, the study results also confirm that banking risk management cannot be limited to credit risk. Other risks that are no less important are liquidity risk, market risk, and operational risk. A bank’s failure to manage liquidity, for example, can create great difficulties in meeting short-term obligations, which has the potential to decrease public trust, damage reputation, and even trigger a bank run (Gulobeva et al., 2019). Market risks such as fluctuations in interest rates, exchange rates, and the prices of financial instruments can also erode profitability if not managed well. This is in line with the findings of research in Nigeria which revealed that comprehensive financial risk management practices, including controlling liquidity and market risks, have a positive impact on increasing banking ROA (Gadzo et al., 2019). In other words, the more integrated risk management practices are, the greater their contribution in maintaining the bank's financial performance.

A more in-depth discussion also reveals the central role of risk governance in strengthening the relationship between risk management and profitability. Banks that implement good risk governance are generally better able to build public trust, comply with regulatory rules, and maintain internal stability. Strong risk governance includes transparency in decision-making, management accountability, and the independence of the supervisory function. Research in ASEAN-5 provides empirical evidence that the implementation of effective risk governance is positively related to an increase in ROA (Karyani et al., 2020). This shows that risk governance is not just administrative, but is also a fundamental pillar that supports the sustainability of the banking business.

Apart from these internal factors, external factors also influence the relationship between risk management and profitability. Bank size, for example, determines the banking capacity to absorb risk. Larger banks usually have wider resources to implement a sophisticated risk management system. However, a large scale also brings consequences in the form of higher systemic risk if management failure occurs. On the other hand, increasingly fierce market competition encourages banks to increase operational efficiency, innovate products, and strengthen digital services, which indirectly contributes to increasing profitability. Strict regulation from the financial authorities also influences risk management behavior, while ensuring that these practices are in line with international standards.

Thus, the results of the discussion confirm that the implementation of comprehensive risk management, combined with strong corporate governance, and adapted to external dynamics, is the main key to increasing profitability while maintaining the sustainability of the banking sector amid global economic uncertainty.

6. Conclusion

This research confirms that risk management has a significant influence on banking profitability, especially as measured using Return on Assets (ROA). Credit risk is the most dominant factor, where the effectiveness of credit management will determine the quality of bank assets and ultimately affect profitability. In addition, liquidity, market, and operational risks have also been proven to affect the bank's financial stability and profitability.

The literature reviewed shows that banks with good risk management practices tend to have a higher ROA, while banks with weaknesses in risk control face a decrease in profitability and reputational losses. Effective risk governance also strengthens public trust and facilitates compliance with regulations, thereby increasing the bank's competitiveness in the market.

Apart from internal factors, the results of the study also confirm that bank size, market dynamics, and external regulations also influence the effectiveness of risk management in increasing profitability. Therefore, risk management must be seen not only as a protection mechanism but also as a business strategy that can create added value and sustainability for the banking sector.

Thus, integrating risk management into corporate strategy is an urgent need amid increasing global uncertainty. ROA as a profitability indicator can be used as an important measuring tool in assessing the effectiveness of risk management as well as a basis for making strategic decisions oriented towards long-term stability and sustainability.

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